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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/699,614	10/30/2003	John J. Kenny	08286.105016	9929
<div>7590 Steven P. Wigmore, Esq. KING & SPALDING 45th Floor 191 Peachtree Street, N.E. Atlanta, GA 30303</div>			<div>EXAMINER BELLO, AGUSTIN</div>	
			<div>ART UNIT 2613</div>	<div>PAPER NUMBER</div>
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		12/27/2006	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

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Office Action Summary	Application No.	Applicant(s)	
	10/699,614	KENNY ET AL.	
	Examiner	Art Unit	
	Agustin Bello	2613	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-75 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-75 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>3/15/04, 6/28/04, 11/08/04</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 1 and its dependents are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In line 6 of the claim the applicant recites “ a second optical transmitter a second analog optical carrier.” This claim language is not clear. Claim 1 further recites that the second optical waveguide coupled to the data service hub receives the *first* analog optical carrier. However, the figures and specification do not support this. Apparently, the applicant intended to claim that the second optical waveguide receives the second analog optical carrier.

3. Claim 1 recites the limitation "the node" throughout claim 1 and its dependents. There is insufficient antecedent basis for this limitation in the claim. The examiner suggests that the claim language be amended to clearly recite “the laser transceiver node.”

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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5. Claims 1-3, 8-11, 16-20, 24-29, 34-38, 41-45, 48-49, 51, 54-56, 58, 61-63, 65-67, 69-70, 72-73, and 75 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bodeep (U.S. Patent No. 5,528,582) in view of Woodward (U.S. Patent No. 7,007,297).

Regarding claims 1, 9, 16, 26, 34, 41, 48, 54, 55, 61, 62, 65, 66, 69, 70, 72, 73, Bodeep teaches a data service hub (reference numeral 110 in Figure 1) comprising: a first optical transmitter (reference numeral 115 in Figure 1) for modulating a first analog optical carrier having a first wavelength with a first electrical broadcast signal; a second optical transmitter (reference numeral 113 in Figure 1) a second analog optical carrier having a second wavelength with the second electrical broadcast signal; a first optical waveguide (reference numeral 101 in Figure 1) coupled to the data service hub and a laser transceiver node (reference numeral 120 in Figure 1) for receiving the first analog optical carrier and propagating it to the laser transceiver node; a second optical waveguide (reference numeral 102 in Figure 1) coupled to the data service hub and the node for receiving the first analog optical carrier and propagating it to the laser transceiver node, the node comprising a combiner (reference numeral 127 in Figure 1) for mixing the first and second analog optical carriers; a third optical waveguide (reference numeral 141 in Figure 1 in the all optical scenario discussed in column 9 lines 59-65) coupled to the laser transceiver node and a subscriber optical interface (reference numeral 143 in Figure 1) for receiving the combined first and second analog optical carriers and propagating them to the subscriber optical interface. Bodeep differs from the claimed invention in that Bodeep fails to specifically teach that the subscriber optical interface comprises a service provider selection device for selecting one of the analog optical carriers. However, Woodward teaches that it is well known in the art to include a service

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provider selection device (reference numeral 170 in Figure 1) for selecting one of the analog optical carriers. One skilled in the art would have been motivated to include a service provider selection device in order to allow a subscriber to select a channel or band of channels (column 4 lines 53-64). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to a service provider selection device for selecting one of the analog optical carriers in Bodeep.

Regarding claims 2, 10, 17, 18, 25, 27, 28, 35, 36, 38, 42, 43, 45, 49, 56, 63, 67, 75, the combination of Bodeep and Woodward teaches that the subscriber optical interface comprises an analog optical receiver (inherent in the end-units of Bodeep in the all optical scenario discussed in column 9 lines 59-65, and shown as 180 in Woodward) for converting the selected analog optical carrier into electrical broadcast signals.

Regarding claims 3, 11, 19, 29, 37, 44, 51, 58, the combination of Bodeep and Woodward teaches a broadcast receiver for demodulating electrical broadcast signals (inherent in the end-units of Bodeep and shown as 196, 198 in Woodward).

Regarding claim 8 and 24, the combination of Bodeep and Woodward teaches that the broadcast signals comprise at least one of analog television broadcast signals (e.g. AM-VSB throughout Bodeep), analog radio broadcast signals, and high density television broadcast signals.

6. Claim 4, 5, 12-13, 20-21, 30-31, 50, 57, 64, 68, and 71 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bodeep in view of Woodward, as applied to claim 1 above, and further in view of Schemmann (U.S. Patent No. 6,687,432).

Regarding claims 4, 12, 20, 30, 50, 57, 64, 68, 71, the combination of Bodeep and Woodward differs from the claimed invention in that it fails to specifically teach that the service provider selection device comprises an optical filter. However, Schemmann teaches that optically filtering an optical signal prior to reception at a subscriber's optical interface is well known in the art (reference numeral 350 in Figure 4). One skilled in the art would have been motivated to optically filter an optical signal prior to reception at a subscriber's optical interface in order to separate the optical signals according to wavelength (column 9 lines 20-33 of Schemmann). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to optically filter an optical signal prior to reception at a subscriber's optical interface.

Regarding claims 5, 13, 21, 31, the combination of Bodeep and Woodward differs from the claimed invention in that it fails to specifically teach that the laser transceiver node comprises a wavelength division multiplexer for combining the first and second analog optical carriers. However, Schemmann teaches that using a wavelength division multiplexer for combining the first and second analog optical carriers is well known in the art (reference numeral 346 in Figure 4). One skilled in the art would have been motivated to use a wavelength division multiplexer for combining the first and second analog optical carriers in order to increase the amount of content available to each subscriber. Therefore, it would have been obvious to one skilled in the art at the time the invention was made to use a wavelength division multiplexer for combining the first and second analog optical carriers.

7. Claim 6, 14, 22, 32, 39, 46, 52, and 59 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bodeep in view of Woodward, as applied to claim 1 above, and further in view of Parsay (U.S. Patent No. 5,694,232).

Regarding claims 6, 14, 22, 32, 39, 46, 52, 59, the combination of Bodeep and Woodward differs from the claimed invention in that it fails to specifically teach that the use of an optical diplexer for mixing the first and second analog optical carriers together with a digital optical carrier. However, Parsay teaches that the use of diplexers to combine digital and analog signals is well known in the art (Figure 3). One skilled in the art would have been motivated to include a diplexer for mixing the first and second analog optical carriers together with a digital optical carrier in order to increase the amount of content available to each subscriber. Therefore, it would have been obvious to one skilled in the art at the time the invention was made to include a diplexer for mixing the first and second analog optical carriers together with a digital optical carrier.

8. Claim 7, 15, 23, 33, 40, 47, 53, 60, and 74 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bodeep in view of Woodward, as applied to claim 1 above, and further in view of Chambers (U.S. Patent No. 5,867,485).

Regarding claims 7, 15, 23, 33, 40, 47, 53, 60, and 74, the combination of Bodeep and Woodward differs from the claimed invention in that it fails to specifically teach that the use of an optical diplexer for separating the first and second analog optical carriers from a digital optical carrier. However, Chambers teaches that the use of diplexers to for separation of digital and analog signals at the subscriber is well known in the art (Figure 5). One skilled in the art would have been motivated to include a diplexer for separating the first and second analog

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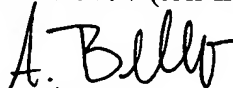
optical carriers from a digital optical carrier in order to increase the amount of content available to each subscriber. Therefore, it would have been obvious to one skilled in the art at the time the invention was made to include a diplexer for separating the first and second analog optical carriers from a digital optical carrier in order to increase the amount of content available to each subscriber.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Agustin Bello whose telephone number is (571) 272-3026. The examiner can normally be reached on M-F 8:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Chan can be reached on (571)272-3022. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Agustin Bello
Primary Examiner
Art Unit 2613

AB